

ABSTRACT OF THE DISCLOSURE

An improved actuator (1) for water heating/cooling and sanitary systems includes a miniaturized D.C. Motor (2) with a mechanical clutch element (4), a first motor reducing unit (6) including a planetary reducing unit with a high gear ratio, a second reducing unit (14) for transforming a rotary movement into a reciprocating axial movement, and a supporting framework (29, 7, 9, 26) for supporting the components, and an electronic card (37) for controlling and driving the motor (2). A plurality of coupling adapters (33) allow the improved actuator (1) to be coupled to manifolds of different manufacturers.